



2020

Vermont Agency of Transportation

Annual Report on Section 106

Historic and Archaeological Resource Project Reviews

Submitted to the Vermont State Historic Preservation Officer and
Federal Highway Administration pursuant to requirements of the:

2019 Programmatic Agreement Among the Federal Highway Administration, the Vermont State Historic Preservation Officer, the Advisory Council on Historic Preservation, and the Vermont Agency of Transportation, Regarding Implementation of the Federal-Aid Highway Program in Vermont



Submitted February 1, 2021

Table of Contents

I.	Introduction.....	4
II.	Table of Summary Statistics.....	4
III.	Highlights from 2020.....	5
IV.	Assessment of Effectiveness of PA.....	5
V.	Discussion of Concerns with Agreement.....	7
VI.	Recommendations.....	8

(Cover: Selected Images of Woodstock Captured During a Summer Resource ID Survey, August 2020)

I. Introduction:

The VTrans Cultural Resources Team (Jen Russell, Judith Ehrlich, Brennan Gauthier, and Kyle Obenauer) reviewed 159 Federal Aid transportation projects in the calendar-year of 2020 under the *Programmatic Agreement Among the Federal Highway Administration, the Vermont State Historic Preservation Officer, the Advisory Council on Historic Preservation, and the Vermont Agency of Transportation, Regarding Implementation of the Federal-Aid Highway Program in Vermont*. As stipulated in Section XIII of the PA, VTrans is submitting this report prior to the Annual Evaluation to review implementation and terms of the Agreement.

While reviewing projects under Section 106, VTrans had only two Adverse Effect projects in this past calendar year. VTrans takes pride in this low number of projects with an adverse effect to cultural resources. This low number reflects an agency-wide culture of early coordination with project design teams and a stewardship ethic that places a high value on avoidance and minimization of impacts to environmental resources.

While a significant portion of the VTrans Environmental Section workload under Section 106 falls under this Programmatic Agreement, the VTrans Cultural Resources staff are also reviewing FRA, FAA, and FEMA projects. Those projects are not addressed or accounted for in this report. This report addresses FHWA Federal Aid projects reviewed by VTrans cultural resources staff from January through the end of the calendar year 2020.

II. Table of Summary Statistics

Historic Section 106 Effect Determination	Effect Determination Counts
Screened	56
NHPA	79
NAE	22
AE-MOA	2
Total Projects	159

VTrans reviewed a total of 159 projects with determinations of effect as Screened through Adverse Effect for potential impacts to historic and cultural resources as part of the project review process under the Programmatic Agreement Among the Federal Highway Administration, the Vermont Agency of Transportation, the Advisory Council on Historic Preservation, and the Vermont State Historic Preservation Officer Regarding Implementation of the Federal-Aid Highway Program in Vermont (PA).

A breakdown of the projects and associated determinations of effect can be found in the spreadsheet located in Appendix A of this report. A separate list of Screened projects can be found in Appendix B of this report.

National Register eligibility determinations are included within the text of the Section 106 Formal Comment Letters and are also listed in a separate chart below showing the final numbers for each determination.

Appendix B (Screened Activities)

A total of 56 projects were reviewed under Appendix B (Screened Activities) of the Programmatic Agreement, including several projects that were reviewed after-the-fact from the Halloween Storm declaration of 2019. These Halloween Storm projects consisted of repair and stabilization work to non-historic structures including shoring up the surrounding embankments, that occurred shortly after the declaration where all work was completed from the existing road. Other Screened activities from 2020 consisted of roadway paving or other routine maintenance projects including sign replacements, guardrail, signals, curbs, and sidewalks outside of historic districts.

No Historic Properties Affected (NHPA)

A total of 79 projects were reviewed and cleared as NHPA under the Programmatic Agreement. This category accounts for the majority of determinations as most of VTrans projects consist of maintaining existing infrastructure with a goal of keeping the footprint to what is necessary to accomplish the work. There are several benefits to maintaining a smaller footprint including reducing the number of times right-of-way acquisition and negotiations are needed, avoiding resources including cultural and natural resources such as wetlands and avoidance of tree cutting in areas where bat habitat may exist. Another benefit is the ability to reduce the number of construction days and traffic restriction where alternatives like road closures are an option over needing a temporary bridge. All these considerations help reduce impacts to resources, properties, and shorten permitting time and accompanying costs.

The major categories of projects falling under this determination consist of the following:

- Roadway maintenance including culvert replacements and minor realignments
- Bridge repair or replacement of non-historic bridges including deck replacements
- Sidewalk projects
- Permanent fixes to culverts that were repaired under Screened above immediately after the emergency storm declaration but required additional work beyond initial stabilization.

No Adverse Effect (NAE)

A total of 22 projects were reviewed and cleared as NAE during 2020. This number is relatively high when compared to the total Adverse Effect projects that occurred in 2020 – once again reflecting a stewardship ethic and coordination to avoid and minimize a project's impacts to environmental resources. The majority of these NAE projects consisted of railway improvements along the Vermont Railway which often include repairs to bridges but the effect is not adverse. Other projects that fell into this category included minor sidewalk or improvement projects within an historic district or on a parcel that had an effect but again, the affect was not adverse. Other examples of projects that resulted in a determination of No Adverse Effect included highway bridge

repairs, roadway improvement projects through historic districts, construction of a detention pond adjacent to a historic property, intersection improvements with historic properties nearby, and more.

Adverse Effect Projects with a Memorandum of Agreement (AE-MOA)

There were two projects reviewed in 2020 where avoidance and minimization were not an option. Both projects, Newbury BO 1447(32) and Berlin BF 026-1(43) were bridge replacement projects. Because the demolition of these two bridges resulted in an Adverse Effect, both projects were reviewed per the regular requirements of Section 106 and not under the PA, therefore these projects are not included in this report.

III. Highlights from 2020

- HP GIS: Supported in part by FHWA Project Development Work Program (PDWP) funds and WCRS(23) project funds, the VTrans Cultural Resources Team and its consultant, VHB, developed GIS and web-based tools to collect, archive, and share historic resource information. VHB created custom applications using Esri's ArcGIS Collector and Survey 123 to document Middlebury's historic resources through VHSSS forms using mobile devices. A web map is used to track survey progress and share information with project stakeholders. This online tool will greatly expedite project review. This robust, geocoded, and query-able data format is a resilient foundation upon which additional functionality can be overlain, facilitating future research by VTrans, other government agencies, and eventually the public. Immediate benefits from this program include data sharing amongst multiple VTrans sections to assist with project-related or other decision-making. By going paperless, this GIS enhances business continuity during times of disruption (such as the current pandemic) and facilitates project transition should staff be reassigned. Looking forward, VTrans and VHB are evaluating how to incorporate existing non-spatial data managed by the Vermont State Historic Preservation Office into the GIS to improve future project review and eventually provide a resource for users outside VTrans.
- Jen Russell attended the Society for Historic and Underwater Archaeology conference in Boston last January 2020. The theme was Revolution and not only recognized Boston's historical past centering around the American Revolution, but it also focused on the broader concept of revolution as a way of thinking, for example, challenges archaeologists currently face in interpretation of the past and our contemporary practice of archaeology in the present. Do we need to revolutionize the way we interpret sites? In addition, it was acknowledged that sites have been misinterpreted in the past and several talks centered around taking a second look at artifacts from a site and using new technology or knowledge we've gained to correct earlier information.
- FRA 106 Overview Training Webinar: Basic overview of Section 106 and NEPA coordination as it applies to FRA funded projects. Hosted by FRA with guest speakers from the ACHP.
- In 2020, there were only two Adverse Effect determinations under Section 106 of the 159 of VTrans projects reviewed for the calendar year.
- FHWA and VTrans continue to work towards participating in the Advisory Council's Program Comment for Post-1945 Concrete and Steel Bridges and Culverts. After consulting

with DHP in December 2020 on the proposed list of significant Post-1945 bridges and culverts, FHWA and VTrans will next consult with potentially interested parties on the proposed list. Once this next step of consultation is complete, the list will be forwarded to the FHWA Federal Preservation Officer to finalize.

IV. Assessment of Effectiveness of PA

At the time VTrans and SHPO entered into this Programmatic Agreement (PA) there existed a need to establish a clearer understanding on how each agency's 36 CFR Qualified staff were interpreting and applying Area of Potential Effect in the Section 106 process. As a result, this current PA focuses on APE as the product and milestone for interagency coordination.

Working under the guidelines and requirements of this PA obliged staff from VDHP and VTrans to participate in project-specific dialogs related to APE. These project-specific dialogs have fostered a mutual understanding between VTrans and VDHP on how to apply APE to transportation projects in VT. This has been an important and valuable exercise... The VTrans 36 CFR Qualified staff (with over 60 years of S106 experience among them) approach the "reasonable and good faith" identification standard in Section 106 review with an in-depth knowledge of the complicated transportation project development process. This unique combination of rare skills ensures stewardship of cultural resources and efficient project delivery. Moreover, by the time most VTrans projects have Conceptual Plans, the VTrans cultural resources staff has worked closely with project managers and designers to ensure avoidance and minimization of impacts to VT's cultural resources.

Working under this Programmatic Agreement has provided a predictable approach to project coordination under Section 106. Colleagues from VTrans and VDHP have coordinated effectively and openly under this agreement. VDHP staff have turned project reviews around within the agreed upon time frame 97% of the time. VDHP staff have also been extremely accommodating in hastening their review turn-around times for emergency and urgent project timelines. VTrans Environmental Section Staff, as well as design staff and upper management recognize and fully appreciate these quick responses and DHP's willingness to assist on these special requests!

Late in 2020 a system-wide upgrade to the Microsoft software platform used to facilitate the PA coordination resulted in a gap of auto-generated notifications to VDHP. Staff quickly noticed this disconnect, and corrected the situation with the assistance of VTrans IT. VDHP staff was extremely accommodating in reviewing the projects that dropped into this coordination gap. It is important to note that while we are utilizing an automated system for project review coordination, the 36 CFR Qualified colleagues at VDHP and VTrans are quick to pick up the phone when necessary and coordinate the old-fashioned way – in person (socially distanced of course). There exists a palpable change in the tenor of coordination between VTrans and VDHP staff now that there is a clearer and mutual understanding of applying APE under S106. VTrans and VDHP staff can approach project coordination more efficiently and effectively with the foundation of that mutual understanding.

V. Discussion of Concerns with Agreement

VTrans currently provides two separate analysis on completed project reviews at the end of each year: one for the National Park Service (NPS) that covers the federal fiscal year from October 1 through September 30 and an annual report on the state of the PA that covers the calendar year from January 1 through December 31. Instead of completing two separate analysis of the numbers for two separate time frames, it would be more efficient if the annual report covered the same time period as the reporting for NPS.

It has become clear that DHP and VTrans agree on what an APE should include so submitting a separate APE memo is no longer necessary. VTrans and SHPO have agreed to not include APE coordination in the next Programmatic Agreement.

After working under the Screened Activities list, VTrans has several recommendations for changes to it to further improve efficiencies without risk to cultural resources. See VIII. Recommendations below.

Utilize NCHRP examples of Exempt and Screened as a starting point for revisiting Exempt and Screened lists.

VII. Recommendations

- During the course of the past calendar year VTrans, VDHP, and FHWA have concluded that both State partners have a clear understanding for approaching and defining a Federal Aid Project's Area of Potential Effect. The current draft of the 2021 Programmatic Agreement does not focus on APE, but rather on the documentation of the final Section 106 determination. Currently in draft, the new programmatic agreement will outline parameters for submittal of documentation of VTrans' Federal Aid projects as Exempt, Screened, No Historic Properties Affected, and No Adverse Effect. Projects resulting in an Adverse Effect Determination under Section 106 will not be part of this new agreement. VTrans and VDHP will coordinate directly on these projects under the normal Section 106 procedures.
- PA Annual Report should cover the previous federal fiscal year from October 1 through September 30 and not the calendar year.
- VTrans and FHWA are working with FHWA HQ to develop a revised Tribal Contact list as well as a revised approach for ensuring effective and efficient Tribal Consultation
- Revising the Screened Projects list:
 - **Roadway:**
 - Language from Appendix B: *Routine maintenance consisting of in-kind replacement of signs, guardrails, median barriers, safety barriers, guideposts, lights, signals, curbs and sidewalks in their existing location when these roadway features are outside historic districts.*

- VTrans recommendation: This Screened Activity should apply to projects within historic districts as well. These types of in-kind maintenance projects have minimal potential to change the look or feel of the transportation infrastructure within the historic districts since the work being undertaken is in-kind in the same location and will look the same after the project is completed. VTrans cultural resource staff review the project plans for these types of projects to confirm the work is in-kind. Since the work detailed under this Screened Activity is reviewed by qualified staff and has minimal potential to affect a historic district, it is VTrans opinion that we should be able to clear the project with the simplified Screened memo instead of a full 106 review memo to further streamline the review process. VTrans recommends removing “are outside historic districts” from the Screened Activity description.
- The technology of traffic signals and lights has changed over the years. It is often not possible to replace these features “in-kind” as to do so would not be considered safe as we would be using outdated technology. For example, traffic signals at intersections often hang in the middle of the intersection from cables strung from wood posts. The technology of traffic signals has improved, and signals are now hung from metal mast arms attached to metal poles instead of along cables. For these types of projects, the signalized intersection is changed by the removal of the wood poles and cables and the installation of metal poles and mast arms; the traffic signal itself remains in relatively the same location. VTrans recommends that projects involving improvements to electronic traffic signals be allowed under Screened Activities when the work is outside historic districts. Therefore, VTrans recommends removing the words “lights” and “signals” from this Screened Activity and creating a new Screened Activity specific to these features: “Replacement of lights and signals with upgraded technology outside historic districts.”

○ **Culverts:**

- Language from Appendix B: *In-kind replacement of culverts less than 50 years old in their existing location provided all work is done from the existing roadway.*
 - VTrans often does not have the original date of construction for culverts so we usually do not know their age and must base our determinations of eligibility on their design. However, VTrans hired a consulting firm to review all the culverts on the state system and create a list of the ones they determined are significant. DHP has reviewed the list and concurs with its findings. Therefore, VTrans recommends we add the report’s list of significant culverts as Appendix C to this PA and change this Screened Activity to reference the list of significant culverts. VTrans recommends changing the description of this Screened Activities to read, “VTrans shall complete a full review of a project that has the potential to affect any of the significant culverts listed in Appendix C. Culverts on the state system that are not on the list in Appendix C are not

historic. Projects affecting these non-historic culverts, provided all work is done from the existing roadway, can be cleared using a Screened Activities form.” *Please note: VTrans is working with Berger/WSP to revise the culvert report per the FHWA/DHP/VTrans meeting on December 3, 2020. At the meeting DHP expressed concurrence with the list of significant culverts, but asked that some language in the report be clarified.*